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BANNER & WITCOFF, LTD.
1100 13th STREET, N.W.
SUITE 1200
WASHINGTON, DC 20005-4051

EXAMINER
PHAN, THANH S

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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/086,644
Filing Date: February 28, 2002
Appellant(s): SCHROCK ET AL.

SCHROCK ET AL.
For Appellant

EXAMINER'S ANSWER

MAILED

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GROUP 2800

This is in response to the appeal brief filed 04/15/05.

(1)   *Real Party in Interest*

A statement identifying the real party in interest is contained in the brief.

(2) *Related Appeals and Interferences*

A statement identifying the related appeals and interferences which will directly

affect or be directly affected by or have a bearing on the decision in the pending appeal

is contained in the brief.

(3) *Status of Claims*

The statement of the status of the claims contained in the brief is correct.

(4) *Status of Amendments After Final*

No amendment after final has been filed.

(5) *Summary of Invention*

The summary of invention contained in the brief is correct.

(6) *Issues*

The appellant's statement of the issues in the brief is correct.

(7) *Grouping of Claims*

The rejection of claims 1-51 stand or fall together because appellant's brief does

not include a statement that this grouping of claims does not stand or fall together and

reasons in support thereof. See 37 CFR 1.192(c)(7).

(8) *Claims Appealed*

The copy of the appealed claims contained in the Appendix to the brief is correct.

(9) *Prior Art of Record*

5,050,141	THINESEN	9-1991
5,526,290	KANZAKI	6-1996

5,771,399   FISHMAN   6-1998

(10)   Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-8, 10-14, 16-29, 31-43, and 45-51 are rejected under 35 U.S.C. 103(a)

as being unpatentable over Thinesen [US 5,050,141] in view of Kanzaki [US 5,526,290].

Regarding Claims 1, 4, 12-14, 16-29, 31-43, and 45-51, Thinesen teaches a device 1

and methods for calculating a pace, comprising, a chronograph (CHRONO mode) for

measuring an elapsed time, a distance memory 5 containing a distance, and a pace

calculation process (PACE mode), wherein the device further including a data memory

5 for storing the calculated pace (Col. 3, lines 25-65; Col. 4, lines 1+; Col. 5, lines 1+;

FIG. 1). In the Thinesen reference, the programmable microprocessor (integrated

circuit) possesses ROM and RAM in order to store all acquired and programmed data in

the device (Col. 3, lines 60+). Thinesen teaches a method of obtaining distance to be

traveled that can be calculated by multiplying the present elapsed time (FIG. 4) by the

currently stored pace in steps per minute (FIG. 5), operator's stride length, and a

conversion factor of 1 mile/5280 feet (FIG. 4), currently stored pace were 135 steps per

minute (FIG. 5), and length of operator stride were 3.5 feet per step, (FIG. 5), the

program would calculate the distance to be traveled as 2.2372 miles (FIG. 4) (Col. 6,

lines 59+', Col. 7, lines 1+, Thus, for example, if elapsed time were 25 minutes That is,

25 minutes.times.l3s steps/minute.times.3.s feet/step.times.1 mile/5280 feet is equal to

2.2372 miles when rounded to the nearest ten-thousandths). Thinesen also teaches a

LAP/SPLIT mode for acquiring numerous time and pace values. Thinesen does not

explicitly teach a device or method comprising a pace calculation process, which

calculates a pace by dividing an inputted distance in a distance memory by the elapsed

time provided by the chronograph. Kanzaki teaches a pace calculation device where the

pace is calculated by dividing a distance by an elapsed time (Col. 1, lines 1+), wherein

the device can calculate a plurality of pace times drawn from inputting a plurality of

target times and distances (FIG. 2). It would have been obvious to a person skilled in

the art at the time of the invention to adapt the Thinesen with a pace calculating method

utilizing the steps of inputting the distance and dividing that value by an elapsed time

value. The Applicant's assertion in the Specification that user's calculate pace times

using calculators or doing the calculations by hand after a workout because there are no

devices that calculate a pace value instantaneously after a workout are false. As shown

in the rejections and in the below cited Prior Art, it is well known to utilize distances,

splits, and elapsed time in order to calculate an average pace time. In regards to the

instant application, the method of inputting a specific value over another value in order

to calculate another value is an obvious step in the art.

Regarding Claims 2-3, Thinesen teaches a device further comprising chronometer (not explicitly numbered, however, the wristwatch provides a count of the hours, minutes, and seconds during a 12 or 24 hour time period, resetting itself to 1:00:00 at the end of each period) and a display 15 which displays the calculated pace (Col. 1, lines 25-65; Col. 4, lines 1+; FIG. 1).

Regarding Claims 5, Thinesen teaches a device, wherein the input device includes at least one depressible button S1-7 (Col. 3, lines 25+; FIG. 1).

Regarding Claim 6, Thinesen teaches a device, wherein the input device includes a first depressible button S4 for selecting a data field, a second depressible button S1/S6 for incrementing a value in a selected data field, and a third depressible button S2/S5 for decrementing the value in the selected data field (Col. 5, lines 19-40).

Regarding Claim 7, wherein the chronograph is implemented using a mechanical structure (not explicitly numbered, Col. 4, lines 55+; Col. 5, lines 1+ are directed towards mechanical counters).

Regarding Claim 8, Thinesen teaches a device further including an optical encoder (not explicitly numbered, display 15 is described as an electroptric display, (Col. 4, lines 55+) for converting an elapsed time measured by the chronograph into a digital format.

Regarding Claims 10-11, Thinesen teaches a device, wherein the chronograph, the distance memory, and the pace calculation process are incorporated into a watch, wherein the watch is a wristwatch 1 (Col. 3, line 26; FIG. 1).

Claims 9, 15, 30, and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thinesen [US 5,050,141] in view of Kanzaki [US 5,526,290] in further view of

Fishman [US 5,771,399]. The Thinesen/Kanzaki combination teaches a device 1 for

calculating a pace, comprising, a chronograph (CHRONO mode) for measuring an

elapsed time, a distance memory 5 containing a distance, and a pace calculation

process (PACE mode) which calculates a pace by dividing the distance contained in the

distance memory by an elapsed time provided by the chronograph, wherein the device

further including a data memory 5 for storing the calculated pace, as well as the

corresponding methods as noted in the above rejections. The Thinesen/Kanzaki

combination does not explicitly teach a device wherein the chronograph, the distance

memory, and the pace calculation process are incorporated into a personal digital

assistant, and further prompting and providing the calculated pace to another device.

Fishman teaches a wristwatch 104 comprising a receiver and a transmitter (240 bi-

directional transfers) for transferring data and information to an external device 102,

wherein the external device is a computer or personal digital assistant (Col. 7; lines 5+).

It would have been obvious to a person skilled in the art at the time of the invention to

adapt the Thinesen/Kanzaki combination to include means to "incorporate" the pace

calculation system to a personal digital assistant, as well as means to provide the

calculated pace to another device. In the instant case, as stated in the 112 2nd

paragraph rejection, the Applicant provides no structural relationship defining how the

claimed pace calculation device can be implemented into a PDA other than stating that

fact in itself. As also stated in the 112 2nd paragraph rejection, the practice of

transferring acquired data from a wristwatch to a computer or PDA is well known in the

art and is not in itself a patentable limitation. Therefore, providing means to achieve

data transfer between devices to the Thinesen reference is an obvious step in the art.

(11) Response to Argument

Applicant argues:

[1] The determination of a pace as recited in the claims is not taught or

suggested by either Thinesen or Kanzaki.

[2] Niether Thinesen's or Kanzaki's technique of determining a pace does not

employ a stored distance and stored elapsed time, as expressly recited in the claims.

[3] Kanzaki discloses calculating a target pace at which a user would need to run

in order to travel a distance in a target time.

[4] The Examiner has specifically noted that the Kanzaki patent discloses the

general formula for calculating pace as: $p=d/w/t$, the Kanzaki patent describes using this

formula to determine a desired pace based upon a target run time. It does not teach or

suggest using an elapsed time to determine an actual pace, as recited in the claims.

[5] A skilled artisan would not have been led to combine the Thinesen and

Kanzai patents in the manner proposed by the examiner.

Examiner disagrees:

[1] and [3] Kanzaki teaches determining a pace by initiating a stop watch, timing

the duration of time that it takes for a runner to run a distance X and setting the pace

therefrom, see Kanzaki column 6, line 53 - column 7, line 8.

[2] Thinesen teaches the use of a pace mode. Kanzaki teaches calculating a

pace by dividing distance by time, therefore to make the pace mode of Thinesen work

one of ordinary skill in the art would divide those two numbers. If the numbers are not stored they would not be available to be divided.

[4] Kanzaki teaches a pace calculation device for determining run times and paces to be set by runners for running a distance. Kanzaki determines the pace by having a runner run a course X with a known distance by the amount of time/elapsed time it takes the runner to run the distance, see column 6, line 53 - column 7, line 8. Kanzaki then determines another pace by making additional runs. Data determined by the test runs is then stored to calculate a pace for the runners to run.

[5] In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, a skilled artisan would have been motivated to combine the pace determine technique of Kanzaki with the pace synchronization device of Thinesen in order to obtained pace calculation necessary to display or set a pace.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

tsp
January 22, 2008

Conferees
Kamand Cuneo *Paula Bradley*
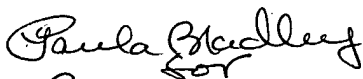   *for*
Darren Schuber

BANNER & WITCOFF, LTD.
1001 G STREET, N.W.
WASHINGTON, DC 20001-4597